

LISTING OF THE CLAIMS

Claims 1-79 (Cancelled).

80. (New) A method of operating an active pixel CMOS imager, comprising:

activating a first pixel in a row connected to a shared column line for a first period of time and then subsequently activating an adjacent second pixel in the row connected to the shared column line for a second period of time, the array comprising the first and second pixels;

detecting a first voltage level at a node of the first pixel;

resetting the first voltage level of the node to a predetermined voltage using a reset transistor addressed by a reset line that extends approximately linearly across the pixel array;

transferring charge collected by the first pixel to the node;

detecting the charge at the node; and

generating an output signal over the shared column line.

81. (New) The method of claim 80, wherein the shared column line extends approximately linearly across the pixel array.

82. (New) The method of claim 81, further comprising a row select line that extends approximately linearly across the pixel array.

83. (New) The method of claim 80, further comprising a row select line that extends approximately linearly across the pixel array.

84. (New) A method of operating a system, comprising:

focusing an image on an active pixel CMOS imager, the imager comprising a pixel array;

activating a first pixel in a row connected to a shared column line and then subsequently activating an adjacent second pixel in the row connected to the shared column line, the array comprising the first and second pixels;

detecting a first voltage level at a node associated with the first pixel;

resetting the first voltage level of the node to a predetermined voltage using a reset transistor addressed by a reset line that extends approximately linearly across the pixel array;

transferring charge collected by the first pixel to the node;

detecting the charge at the node; and

generating an output signal over the shared column line, the output signal corresponding to the image.

85. (New) The method of claim 84, wherein the shared column line extends approximately linearly across the pixel array.

86. (New) The method of claim 85, further comprising a row select line that extends approximately linearly across the pixel array.

87. (New) The method of claim 84, further comprising a row select line that extends approximately linearly across the pixel array.

88. (New) An active pixel CMOS imager, comprising:

a plurality of pixels to generate an output signal associated with detected light, the plurality of pixels arranged in rows and columns of an array;

a plurality of column lines each connected to at least two adjacent pixels of a row in the array, the column lines being connected to output circuitry to output the signal;

a plurality of odd row select lines orthogonal to the column lines to address odd pixels in the rows;

a plurality of even row select lines orthogonal to the column lines to address even pixels in the rows;

a column driver to address pixels connected to the column lines; and

a row driver to address pixels through the odd row select lines and the even row select lines.

89. (New) The imager of claim 88, wherein the column lines extend approximately linearly across the array.

90. (New) The imager of claim 89, wherein the odd and even row select lines extend approximately linearly across the array.

91. (New) The imager of claim 88, wherein the odd and even row select lines extend approximately linearly across the array.

92. (New) The imager of claim 88, further comprising a plurality of reset lines that extend approximately linearly across the array.

93. (New) A method of operating a CMOS imager, comprising:
- addressing even pixels in a row of pixels of an array of pixels using a row driver coupled to an even row select line;
 - providing a first output signal associated with light detected by the even pixels to a plurality of column lines coupled to the even pixels;
 - addressing odd pixels in the row of pixels via an even row select line; and
 - providing a second output signal associated with light detected by the odd pixels to the plurality of column lines coupled to the odd pixels.
94. (New) The method of claim 93, wherein the column lines extend approximately linearly across the array and are approximately orthogonal to both the even row select line and the odd row select line.
95. (New) The method of claim 94, wherein the odd and even row select lines extend approximately linearly across the array.
96. (New) The method of claim 94, further comprising a plurality of reset lines that extend approximately linearly across the array.